REMARKS

This is a response to the non-final Office Action dated December 29, 2004.

Claim 17 and 28 are amended, and claims 29-44 are new.

In particular, claims 17 and 28 are amended to clarify that a supply power of a direct current power supply circuit is reduced by a predetermined fraction if a detected result reaches a target value. See Figure 3, step S20, and Fig. 4A, for example.

Applicants acknowledge that claims 21-23 and 25-27 contain allowable subject matter. Since the new claims 29-44 incorporate the allowable subject matter, these claims should be in condition for immediate allowance. Specifically, claim 29 incorporates the subject matter of claim 17 and 21, and claim 36 incorporates the subject matter of claim 17 and 25. Claims 30, 31, 32, 33, 34 and 35 incorporate the subject matter of claims 22, 23, 18, 19, 20 and 24, respectively. Similarly, claims 37, 38, 39, 40, 41 and 42 incorporate the subject matter of claims 26, 27, 18, 19, 20 and 24, respectively. Method claim 43 incorporates the subject matter of claims 21 and 28, while method claim 44 incorporates the subject matter of claims 5 and 28.

Claims 17-28 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. patent 5,558,671 to Yates. Applicants respectfully traverse the rejection. Yates provides an impedance feedback monitor for an electrosurgical instrument.

Based on a predicted model of tissue impedance and a number of initial impedance readings, the impedance at which tissue treatment is completed is predicted. (Abstract). In particular, an impedance Z is measured, and a minimum impedance is set to the measured impedance Z as long as the measured impedance is decreasing. (Fig. 8, blocks 226 and 227, col.

11, lines 40-42). When the measured impedance is greater than or equal to $f(Z_{min})$, i.e. the threshold impedance, a coagulation complete flag is set (block 230), and the RF is turned off (block 232). (Fig. 8, col. 11, lines 42-47).

In contrast, Applicants' claims 17 and 28 sets forth that a supply power of a direct current power supply circuit is reduced by a predetermined fraction, e.g., 50%, if a detected result reaches a target value. Applicants' approach is advantageous because it allows the coagulation treatment to be performed in a consistent manner independently of the surface area (page 16, lines 18-25). Moreover, the completion of the treatment can be verified by the surgeon and continued, if necessary.

Moreover, there is no disclosure or suggestion in Yates that $f(Z_{min})$, or target impedance Z_{target} (col. 8, lines 9-11 and 40-42), is a target value that is selected from among a plurality of predetermined target values.

Withdrawal of the rejection under Yates is therefore respectfully requested.

Claims 20 and 24 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. patent 5,558,671 to Yates in view of U.S. patent 6,083,223 to Baker.

Baker provides a method an apparatus for welding blood vessels in which a controller can be used to modulate the RF energy delivered to electrodes. RF power can be turned off or modulated based on when the measured impedance level reaches a maximum impedance level, or the rate of change of the measured impedance level exceeds a parameter as it rises toward the maximum impedance level (col. 9, lines 56-67). However, there is no mention of selecting a target value based on an amount of time corresponding to variations in a sampled electric current

value, where the target value is selected from among a plurality of predetermined target values, and corresponds to an estimated therapeutic condition upon completion of a treatment.

Moreover, it would not be obvious to combine the teachings of Yates and Baker as suggested by the Examiner because they are incompatible and disparate approaches that could not be combined into a working system. In particular, Baker is concerned with controlling power to maintain the measured impedance between minimum and maximum levels, or below a maximum rate, where the levels and rate are fixed throughout the treatment, while Yates is concerned with controlling power to maintain the measured impedance below a threshold impedance $f(Z_{min})$ that is not fixed throughout the treatment. The Yates approach therefore has no use for a rate of change of impedance in controlling power. "If when combined, the references 'would produce a seemingly inoperative device,' then they teach away from their combination." Tec Air Inc. v. Denso Manufacturing Michigan Inc., 192 F.3d 1353, 52 USPQ2d 1294 (CAFC 1999). One of ordinary skill in the art would intuitively see this, and would therefore be led away from the proposed modification.

Furthermore, one cannot base obviousness upon what a person skilled in the art could or might try but rather must consider what the prior art would have led a person skilled in the art to do. In re Antonie, 559 F.2d 618 195 USPQ 6 (CCPA, 1977). The Examiner must make a showing of a suggestion or motivation in the art to combine the references. In re Rouffet, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998). The Examiner has failed to make such a showing.

Withdrawal of the rejection under Yates and Baker is therefore respectfully requested.

In view of the above, the application is believed to be in condition for immediate allowance. Early and favorable consideration is therefore respectfully requested. The Examiner is requested to telephone the undersigned if there are any further issues to address.

Respectfully submitted,

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